

In reply to the Office Action of July 21, 1999, Applicants present the above amendments and provide the following remarks. There is clear antecedent basis in the Application, as filed, for the above amendments to claims.

Claim 5 is objected to under 37 CFR 1.75(c) as an improper multi-dependent claim. As amended, claim 5 satisfies all requirements under this section.

REJECTIONS UNDER 35 USC 112

In the Office Action, claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the Specification in such a way to reasonably convey to one skilled in the relevant art that the inventors, at the time of the invention was filed, had possession of the claimed invention. Specifically, the Office Action states that claim 1-4 encompass the genus of polynucleotides encoding all species and allelic variants of β -amyloid peptide-binding protein (BBP) and that the Specification does not adequately describe the genus of nucleotides encoding all BBP's. Applicants teach novel protein and amino acid sequences that bind human β -amyloid peptide, along with polynucleotides encoding such sequences. Claim is amended such that the polynucleotides of (j) and (k) encode an amino acid sequence that binds human β -amyloid peptide. This claim amendment overcomes the above rejection, which is raised against claims for any protein that binds a β -amyloid peptide.

In the Office Action, Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for use of the term "homologue". The Office Action states that this term does not have clear metes and bounds. In the subject patent application, the Specification describes the term homologues, with sufficient "metes and bounds" that the term itself does not raise any issue of indefiniteness under the second paragraph of 112 (See Applicants' Specification at page 19, line 20, through page 20, line 9.). Accordingly, this rejection should be withdrawn.

REJECTIONS UNDER 35 USC 102 (b)

In the Office Action, claims 1 and 11 are rejected under 35 U.S.C. 102(b) as allegedly anticipated by EST 178050 in Adams et al. Applicant respectfully submits that the Adams reference does not actually provide a disclosure for the claimed polynucleotides. First, it appears that Adams et al. made a publication on their work in September 1995; however, all sequence information does not appear to have been available as of that date. After September 1995, Adams et al later made their EST sequence available in a public database after the priority filing of the parent application, filed April 16, 1997. In addition, the Adams et al. reference, at page 16, states that the sequence information is not freely available since a recipient for the information needed to agree to sign a waiver of

liability. Also, certain sequences were subject to a potential recipient agreeing to terms and executing an option agreement for Human Genome Sciences, wherein the recipient was required to give rights to Human Genome Sciences for commercializing potential products (any whatsoever?) that recipient developed from mere use of the data. Accordingly, it is submitted that the cited Adams reference of 1995 does not place the EST 178050 in the prior art; therefore, this reference is not available as 102 reference. Applicants further note that any EST of related to the Adams reference would, at best, disclose some form of nucleotide sequence that is expressed as a sequence tag (EST). The Adams reference does not disclose a nucleotide encoding a protein, and the Adams reference does not describe a function for the EST.

REJECTIONS UNDER 35 USC 103

In the Office Action, Claims 2-4 are rejected under 35 U.S.C. 103(a), as allegedly obvious over Adams et al. in view of Gellissen et al. The latter reference, as stated by the Examiner, is not cited for disclosing any additional information regarding the sequences of claim 1. The Gellissen reference is merely cited since it, at best, discloses a general teaching for expression and for host cells. However, as set forth above, the deficiencies of the Adams reference is not obviated by any teaching of Gellissen, and accordingly a *prima facie* case of obviousness is not made by the either reference alone or when combined. Accordingly, the rejection should be withdrawn.

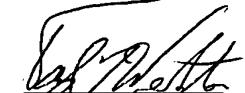
As the court stated in *In re Lalu*, 223 USPQ 1257, 1258 (Fed. Cir. 1984):

"In determining whether a *prima facie* case of obviousness exists, it is necessary to ascertain whether the prior art would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or modification...The prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modification needed to arrive at the claimed compound".

Applicants submit that such a motivation is clearly missing in the cited art references and that the references have been improperly combined. Neither cited reference teaches or enables the polynucleotide sequences of the claimed invention.

In conclusion, applicants submit that the all rejections are overcome and that the case be placed in line for issuance.

Respectfully submitted,



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